

NOXUBEE NATIONAL WILDLIFE REFUGE  
TIMBER - WILDLIFE MANAGEMENT  
ANNUAL AREA PRESCRIPTION  
COMPARTMENT #11  
SCHEDULE FY OPERATION - 1979

Approved:

Date

Approved and Submitted:

Date

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## LOCATION

Compartment #11 is located on the southeast section of Noxubee National Wildlife Refuge in Sections 11, 12, 13, and 14, R14E, T16N in Winston County and Sections 7, 8, 17, and 18, R15E, T16N in Noxubee County.

It is bounded on the north by Goose Pen Road, east by Ewing Road, west by Dummy Line Road, and south by Section Line Road.

## DESCRIPTION

Compartment #11 is located in the flatwood soils of Mississippi which are composed of silty material with poor internal drainage.

The topography is rolling to flat with no major drainage pattern in the compartment.

Three major timber types are present on Compartment #11:

- |                         |           |
|-------------------------|-----------|
| 1. Pine type            | 337 acres |
| 2. Pine-hardwood type   | 523 acres |
| 3. Upland hardwood type | 218 acres |

Approximately 420 acres were not included in the annual prescription. This 420 acres is made up of 60 acres of pine-hardwood and 360 acres of cutover upland hardwood. The 360 acres was cutover by Georgia Pacific approximately 10 years ago when they acquired this tract and reserved all timber rights for the pine sawtimber. At the present time, this tract supports a good stand of pine regeneration and consequently, needs no prescription during this cutting cycle.

Of the 1,078 acres in Compartment 11, 3% is in pine regeneration, 12% in pine-hardwood, and 5% in upland hardwood.

As a whole, Compartment 11 is in excellent condition, being well spaced and fully stocked with large sawtimber, resulting in no major sawtimber improvement cuts.



The total pine sawtimber volume is 6,225,773 board feet (International  $\frac{1}{4}$ " Rule) averaging 5,775 board feet per acre and 2,241 cords with 2.1 cords per acre. The total hardwood sawtimber volume is 2,382,280 board feet averaging 2,210 board feet per acre and 3,327 cords at 3.1 cords per acre. In total there are 8,608,053 board feet of sawtimber and 5,568 cords of pulpwood which average 7,985 board feet of sawtimber and 5.2 cords per acre.

(See Summary Sheet in Appendix for complete data.)

#### CRUISING METHOD AND AREA CRUISED

Compartment #11 was cruised using 281 one-fifth acre plots on 1,078 acres with cruise lines established eight chains apart and plots five chains apart for a 5% sample of the area. Cruising was completed on March 29, 1978.

Stand boundaries were obtained by type mapping during the cruise and by the use of aerial photographs. Data was worked up by computer at Mississippi State University.

Observations were made by the forester along cruise lines to determine the presence or absence of red-cockaded woodpecker activity in stands with suitable or potential habitat. Red-cockaded woodpecker activities were reported on twelve sites.

#### MANAGEMENT OBJECTIVES

The objectives of Noxubee's timber-wildlife management program are to provide favorable habitat for both game and non-game species of mammals, birds, amphibians, and migratory waterfowl habitat.

In pine stands emphasis is placed on managing for the red-cockaded woodpecker, one of three endangered species on the refuge, by creating the habitat necessary for the expansion of present colonies and preserving habitat that they now occupy.

Active cavities, old cavities, and start holes have been observed and mapped on twelve sites. These areas and potential habitat adjacent to these areas will be given special recognition to be discussed in Recommended Treatments.



Diversivication of timbered lands is a major objective which provides habitat for many species of wildlife from both a vertical stratification (grass, shrub, young saplings, and the mature overstory) and a horizontal stratification (an open, mature, park-like stand adjacent to a dense stand of pine saplings).

#### RECOMMENDED TREATMENT

The treatments prescribed will benefit a broad spectrum of wildlife species by creating diversification of the forest and by the specific treatments prescribed to provide suitable habitat for the red-cockaded woodpecker.

1. Rotation Age - Pine and pine-hardwoods are managed on an 80 year rotation age. An exception to this is red-cockaded woodpecker sites. The habitat for this target species require overmature pines infected with heart-rot (*Formes pini*). Adjacent potential cavity trees will be left undisturbed to allow for colonization and to act as replacements for those cavity trees that may be killed by insects, disease, lightening, or other natural causes.
2. Prescribe Burning - Compartment 11 is scheduled to be burned every three years. A prescribe burning program benefits many species of wildlife by:
  - A. Increasing the browse for species such as deer
  - B. Providing more succulent and palatable shoots as a result of sprouting
  - C. Encouraging the growth of annuals and biennials
  - D. Eliminating hazardous excess fuel accumulation reducing the danger of uncontrolled wildfire
  - E. Providing open, park-like stands for the red-cockaded woodpecker

Four hundred and seventy three acres were prescribe burned in stands 3, 4, 6, and 7 during 1977-1978.

(See Prescribe Burn and TSI Map in Appendix.)



3. TSI - Those sites that support red-cockaded woodpecker activity and the surrounding areas with suitable habitat will be checked more closely. If needed, TSI work will be instigated to:
  - A. Reduce the larger understory stems that are of a sufficient diameter preventing their control by a prescribed winter burn
  - B. Control individual stems that block or interfere with red-cockaded woodpecker cavities which could result in abandonment of the nest or roost site

(See Prescribe Burn and TSI Map in Appendix.)

#### SILVICULTURAL TREATMENTS

Silvicultural treatments are recommended for ten of 1,078 acres in Compartment 11. As a result of the first cutting cycle during the first ten years of Noxubee Forest-Wildlife Management, the compartment is in excellent condition and no sawtimber thinning or improvement cuts are recommended.

The only treatment recommended at this time is a pine pulpwood thinning of ten acres.

#### METHODS OF SALE AND ACCESS

The pine pulpwood thinning includes approximately ten acres in Stand 3 with a harvest of 100 cords. Access to this area is east off Goose Pen Road. Harvest methods and regulations will be strictly enforced on this sale area because of its location on said road.



MOORELAND WILDLIFE REF  
SUMMARY SHEET - COMPARTMENT #  
OPERATION: FY '79

TYPE	STAND #	STAND TYPE	ACRES	COORDS	PINE LEAVE BOARD FEET	BF/ACRE	PINE CUT COORDS	CO
PINE	1	P4F	36	24	264,460	7,346	0	1
	3	P3F	121	203	866,852	7,164	100	2
	4	P3F	29	107	133,380	4,599	0	1
	9	P4F	47	119	365,022	7,766	0	1
PINE TYPE TOTALS	10	P4F	104	300	834,507	8,024	0	1
			337	753	2,464,221	7,312	100	7
PINE-HARDWOOD	2	PH4F	60	31	278,849	4,647	0	3
	6	PH3F	140	385	1,125,168	8,037	0	3
	7	PH4F	151	394	1,090,535	7,222	0	3
	11	PH4F	152	431	629,058	4,136	0	5
PINE-HARDWOOD TOTALS	13	PH4F	20	24	145,480	7,274	0	1
			523	1,265	3,269,090	6,251	0	1,6
UPLAND HARDWOODS	5	UH4F	50	79	187,250	3,745	0	1
	8	UH4F	125	39	244,080	1,953	0	4
	12	UH4F	43	5	61,132	1,422	0	3
			218	123	492,462	2,259	0	9
UPLAND HARDWOOD TOTALS								
COMBINED TOTALS FOR COMPARTMENT #11			1,078	2,141	6,225,773	5,775	100	3,32

NOXUBEE REFUGE COMPARTMENT 11 - 1,078 ACRES FY - 78 OPERATION

# Prescribe Burn & Possible TSI Areas

## KEY TO RECOMMENDED TREATMENT

TYPE	SIZE CLASSES	STOCKING
1-Seedlings		L-Light
2-Poles		M-Medium
3-Small Sawtimber		F-Full
4-Large Sawtimber		

## LEGEND - OTHER SYMBOLS

○ STAND NUMBER

----- STAND BOUNDARY

== GRAVEL ROAD

--- FIREBREAK OR TRAIL

~ DRAW OR CREEK

--- DRAW OR CREEK

Prescribe Burn Area  
Possible TSI Areas

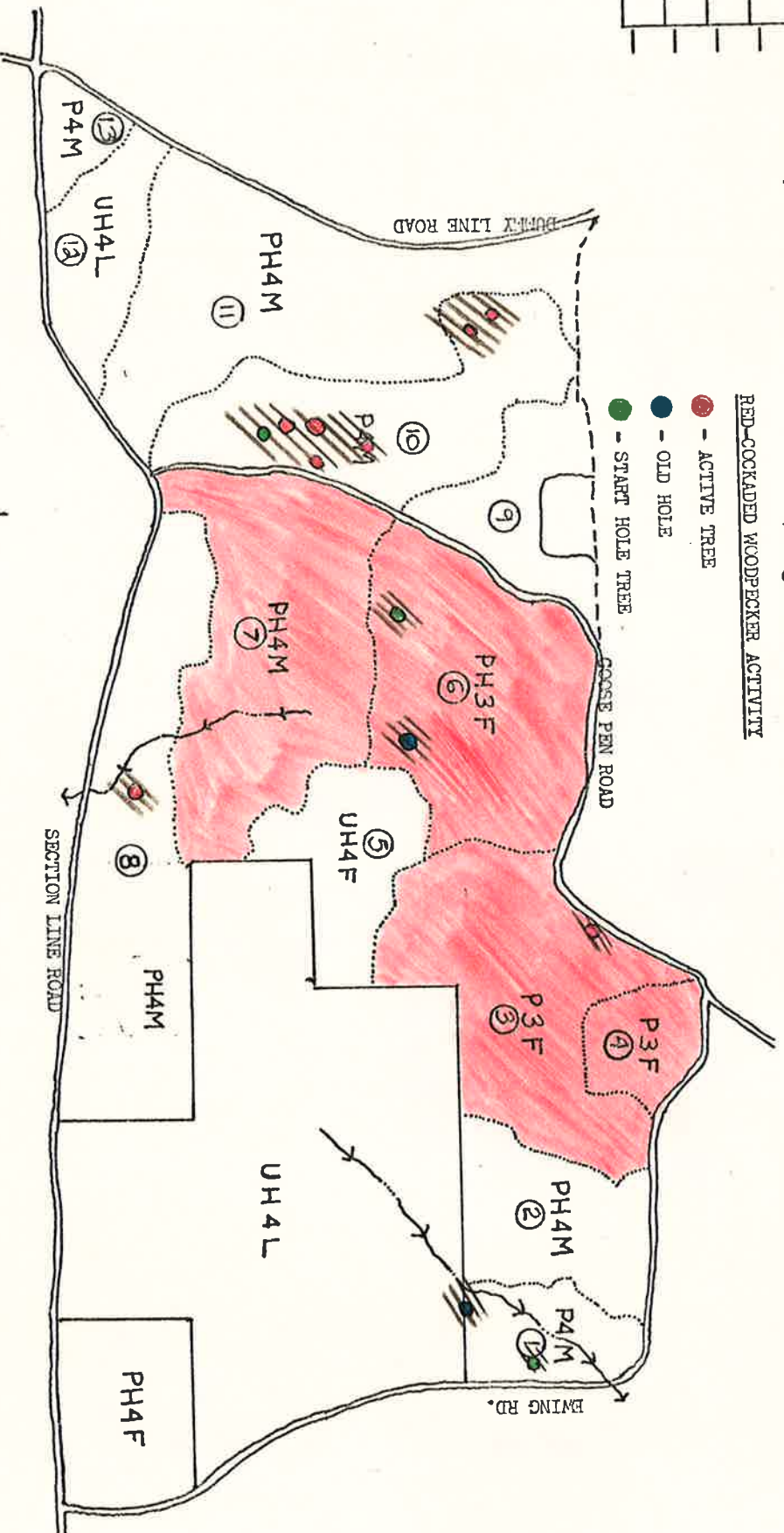
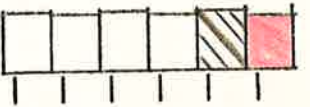
P-Pine  
PH-Pine Hwd.  
UH-Upland Hwd.

## RED-COCKADED WOODPECKER ACTIVITY

● - ACTIVE TREE

● - OLD HOLE

● - START HOLE TREE



SCALE 4" = 1 MILE